K-12 POLICY

Unlocking Doors and Expanding Opportunity:

Moving Beyond the Limiting Reality of College and Career Readiness in California High Schools

The Education Trust–West

JULY 2011

To meet California's demand for a more educated workforce, high schools must dramatically increase the number of students who earn diplomas and graduate with meaningful preparation. Yet disturbingly, few students graduate with the college-ready coursework needed to access our state's public university system. This is especially true for low-income students and students of color, who are also disproportionately tracked into less rigorous "career education" courses. In this report, we highlight these troubling trends and call for a more integrated and equitable approach to college and career preparation—so that high school serves to open doors to both college *and* career options for all students.

Unlocking Doors and Expanding Opportunity:

Moving Beyond the Limiting Reality of College and Career Readiness in California High Schools

California's prosperity has long depended on the quality of its workforce, yet California's high schools are falling short when it comes to preparing students for college and careers. Indeed, just three quarters of students earn a high school diploma, and those who do graduate often lack genuine college and career options.

This is especially true for the state's Latino and African-American students, who comprise 60 percent of the state's public school population. Only six out of every ten Latino and African-American students who enter our high schools actually graduate. Of these graduates, less than a quarter complete the coursework necessary to apply for admission into a four-year public university in California.

If these statistics weren't dismal enough, the data on college success is just as alarming. For both Latino and African-American students, college admission doesn't guarantee success. Six-year graduation rates in the California State University (CSU) system top out at 38 percent for African-American students and 45 percent for Latinos.[1] In the University of California (UC) system, barely three quarters of Latino and African-American students graduate in six years.[2] And in the state's community colleges, less than a third of Latino and African-American students who showed intent to transfer to a four-year college actually transferred, even after six years.[3]

At the same time, there has been a dramatic ten-year decline in the employment rate among teens and young adults.[4] For those who do find their way into the workplace, employers are increasingly demanding advanced levels of preparation. Jobs once thought of as "blue-collar" now require a rigorous academic foundation. Automotive technicians, plumbers, manufacturers, and the building trades require "college-track" levels of physics and mathematical skills, not to mention strong English literacy.[5] And these days, much of the training for these occupations takes place in two-year colleges.

To fill workplace needs over the next two decades, California will need one million more college graduates.[6] These graduates are especially needed in high-growth job sectors like business, arts and design, healthcare, and transportation—which now either require or have dramatically increased their proportion of college-educated workers and are projected to employ greater numbers of workers with bachelor's degrees.[7]

To respond to these needs, California's high schools must dramatically increase not only the number of students who are earning diplomas, but the number of students who are graduating with meaningful preparation. This means ensuring that students have the skills, knowledge, and coursework necessary to access college and career opportunities. And it means eliminating the systematic tracking that exacerbates differences among student subgroups, whereby low-income students and students of color receive less rigorous coursework, leading to inferior educational outcomes and fewer career opportunities.

Luckily, there is a fresh groundswell of commitment to high school reform in California and across the country, with educators and policymakers committed to expanding college and career readiness. "Linked Learning" is one such effort. When implemented in keeping with its vision, it promises to increase graduation rates and prepare students for both college and career options by offering an engaging, relevant, and rigorous course of study—one that includes college-preparatory coursework, challenging technical courses, work-based learning opportunities, and supplemental services to support students. But for the Linked Learning approach to work, our high schools must be prepared to open doors to both college and career options for all students versus the traditional practice of closing one door to open the other.

This shift will require two important steps:

1. A commitment to *college* preparation that is not yet seen in districts across the state, as this report will demonstrate. In the following pages, we draw upon findings

from district-level high school transcript analyses conducted by The Education Trust—West (ETW) over the past six years to demonstrate that overall levels of access to and success in college-ready coursework are far too low, especially for low-income students and students of color.

2. A new way of thinking about *career* preparation—one that raises the bar for the level, rigor, and relevance of coursework students are accessing, regardless of what they plan to do after high school. The data in this report show that few students are currently receiving a truly integrated college-ready and career-ready education, and that "career education" is often a less rigorous option targeted disproportionately at low-income students and students of color.

By reframing college and career readiness in these terms and making a commitment to equity in opportunity, we can ensure that all high school graduates in California have the skills, knowledge, and coursework needed to unlock all of the doors in front of them.

UNLOCKING DOOR ONE: COLLEGE READINESS

In California, not every student who earns a high school diploma may apply to a state four-year university. This is because the UC and CSU systems require students to complete a set of college-preparatory courses, called "A through G," in order to apply for admission. Statewide, only 35 percent of high school graduates completed this sequence with satisfactory grades in 2009, with just 27 percent of African-American and 26 percent of Latino graduates achieving A-G eligibility.

Offering A-G to all students and making it the default graduation requirement would greatly expand the number of high school students graduating college-eligible and college-ready. Twenty other states and the District of Columbia have already adopted college-ready graduation requirements and curricula.[8] While California has failed to do so at a statewide level, dozens of school districts have raised expectations for students by adopting A-G as their standard high school curriculum.

About The Education Trust—West's *Educational Opportunity Audit* and *Blueprint for Action*

Over the past six years, ETW has partnered with nine districts to document baseline levels of A-G access and completion through an "audit" of student transcripts in order to create a "blueprint" for implementing college-ready graduation requirements and curricula. The results of these partnerships offer insight into existing levels of college eligibility and readiness in California. In this section, we highlight findings from a sample of these districts, focusing on the overall levels of access to and success in A-G, as well as the district practices that have contributed to these outcomes.

The process includes two distinct parts:

1. **An Educational Opportunity Audit,** beginning with an analysis of recent graduates' transcripts. Through this analysis, ETW exposes patterns of course-taking that exist for subgroups of students, identifies the barriers preventing students from accessing college-ready curriculum, and highlights the interventions, if any, in place to keep students from failing. In addition, we analyze master schedules and district policies, and we speak with school and district staff, parents, and students through a series of focus groups. Together, these research activities provide powerful insights into the educational journeys of students through high school and the variable experiences of groups by ethnicity, class, language, and disability status.

2. **A Blueprint for Action** process through which district and school leaders work with teachers and community stakeholders to explore the findings from the audit process and address ETW's recommendations. With technical assistance from ETW, they work to develop a blueprint for implementing a college-ready and career-ready curriculum for all students. The blueprint is the action plan that details the steps necessary to transform course-taking patterns so that all students can enroll in the full complement of A-G courses. It addresses a broad range of issues ranging from district and school policies and procedures, facilities and finance, staffing, curriculum, and support services.

Below, we share findings from our five most recent district partnerships, with a focus on students' course-taking pathways, gaps in opportunity associated with access to coursework, and gaps in achievement associated with success in those classes. These gaps function as barriers to post-secondary opportunity and success.

These five districts range in size and location throughout California, from large urban to small suburban. They include districts with both high and low concentrations of students of color and low-income students. (See Table 1.) As such, they represent a cross-section of California and therefore offer insight into patterns that may be seen statewide.

TABLE 1: Characteristics of the five districts included in our analysis

District	Number of Students	Low-income Students	Latino Students	African-American Students
A	<20,000	23%	26%	2%
B	20,000-50,000	70%	39%	33%
C	<20,000	42%	47%	3%
D	20,000-50,000	79%	94%	0%
E	>100,000	65%	46%	12%

EDUCATIONAL OPPORTUNITY AUDIT SAMPLE AND METHODS

SAMPLE OF DISTRICTS

In this report, we conduct a meta-analysis across five of the nine districts with whom we have conducted an Educational Opportunity Audit (EOA). These five were selected because they represent the most recent partnerships; each of these audits was completed between 2008 and 2010. Together, this analysis is representative of over 11,000 senior transcripts.

METHODS

To determine the level and extent of college and career preparation for high school graduates, ETW reviewed the complete high school transcripts of one cohort of seniors in each of the sample districts. In addition, we reviewed the course of study, master schedules, and other relevant documentation from the sample school districts and high schools.

In three of these districts, ETW reviewed physical paper transcripts, and in two districts we analyzed electronic transcript data. The transcript analysis allowed us to assess course-taking patterns of students, disaggregated by subgroup; levels of access to intervention classes; and district-level barriers and obstacles preventing a student from accessing or completing the full UC/CSU A-G course sequence. For example, a barrier can be simply the lack of access to or enrollment in an A-G course, or it can be a grade lower than C, which prevents the student from receiving A-G "credit" for that class.

Along with quantitative transcript analysis, the EOAs included multiple focus groups, surveys, and individual interviews with district staff, school staff, parents, and students. These research activities provided data that allowed us to further understand trends identified through our transcript analysis and set the stage for district and school-level planning to improve rates of college and career readiness.

College-Readiness Findings from ETW's Audits

In a recent report by the Harvard Graduate School of Education's Pathways to Prosperity Project,[9] the authors argue that the poor outcomes of Latino and African-American students in the nation's schools could be traced to an over-emphasis on college-preparatory or "college for all" standards and curricula. The authors seek to make the case that this emphasis on college preparation has robbed students of the opportunity to learn career-preparatory skills in high schools, leading to mass disengagement from learning.

In contrast, the overarching finding from our work at the district level is that, on a practical level, school districts have not been committed to a "college for all" strategy. Indeed, both ETW's district-level work and statewide data on college eligibility among graduating seniors demonstrate that too few students, particularly students of color and low-income students, are provided access to or the opportunity to succeed in college-preparatory courses.

One of the initial findings from our district-level work was the clear misalignment between district graduation requirements and the A-G requirements. Districts expect less of their students, in terms of course completion, than the UC and CSU systems, especially in math, foreign language, science, and visual and performing arts. While there was some variation among the districts, most did not require Algebra II, and most required fewer world language courses than the state's public university systems.

With districts requiring fewer high-level courses than the state's universities, it is no surprise that many students never take the courses required to be UC/CSU eligible. In the five sample districts, less than two-thirds of graduating seniors took the necessary A-G courses. These rates of "access" ranged from a low of 37 percent to a high of 67 percent.

Since UC/CSU eligibility is predicated on both taking the courses and maintaining at least a C average, rates of "success" in the college-ready course sequence are even lower. The rates of seniors graduating with the necessary grades and coursework to even apply to a four-year California public university ranged from 24 to 60 percent.

Sadly, African-American and Latino students were less likely to access and succeed in these courses than their white and Asian peers. (See Figure 1.) For example, Latino students' success rates ranged from 21 to 35 percent, while between 20 and 63 percent of white students took and passed the necessary classes. The statistics are even more troubling for English learners and students with disabilities. For English learners, the high point of access was 16 percent and low point, zero percent. For students with disabilities, districts across the board displayed both limited access and near non-existent success, with between zero and 18 percent of students accessing and passing the A-G sequence.

Even within districts, there were significant differences

FIGURE 1: Percent of students, by district and race, taking and passing the A-G course sequence

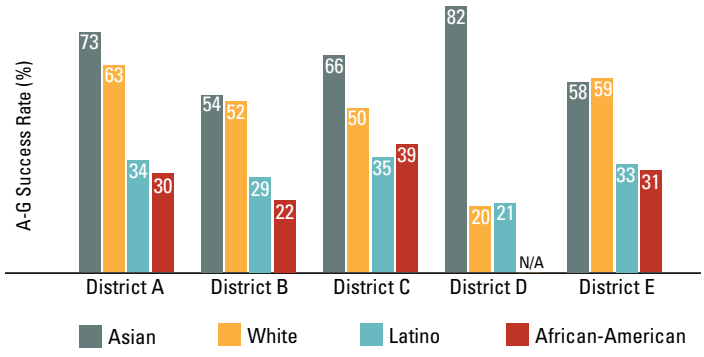
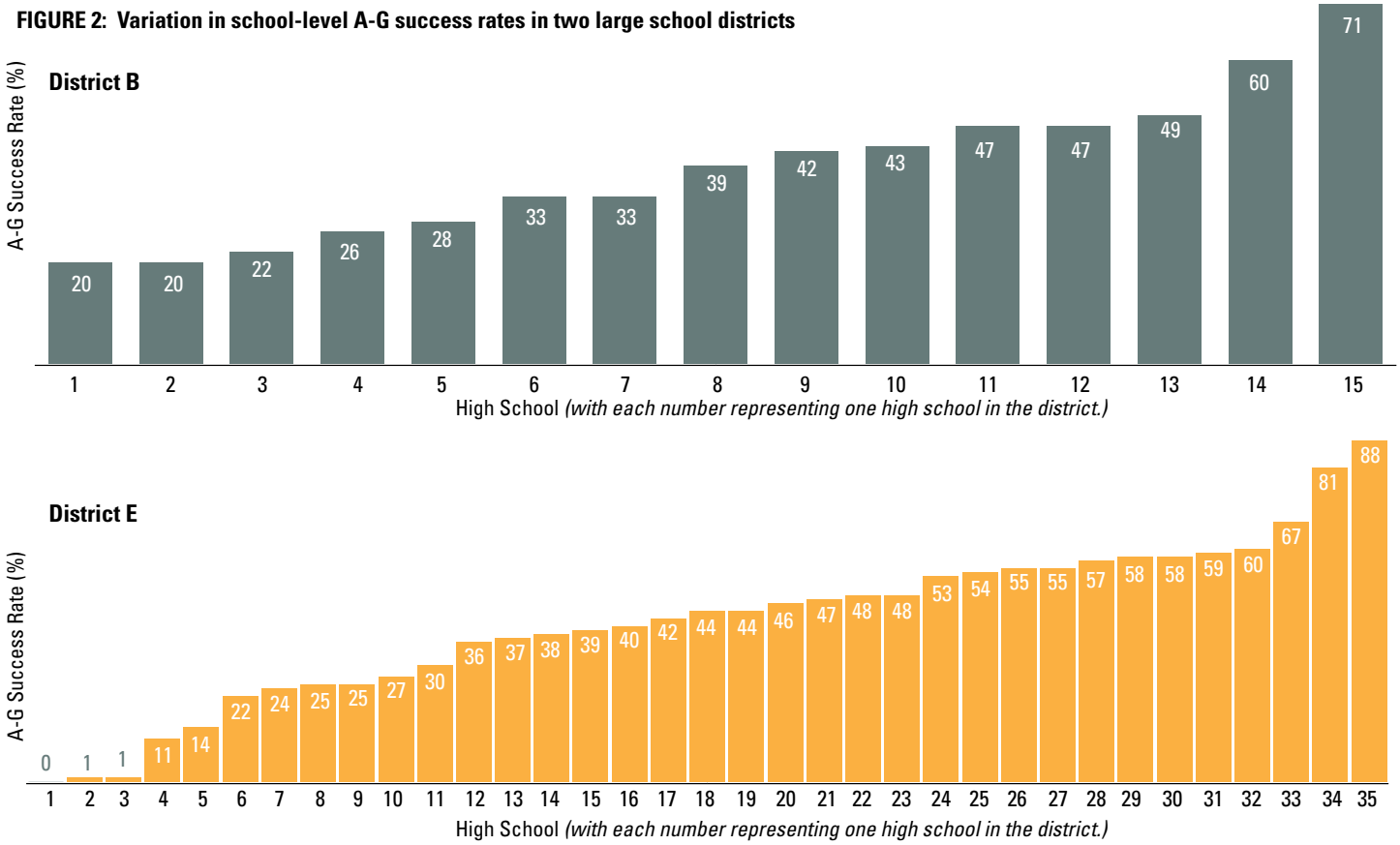


FIGURE 2: Variation in school-level A-G success rates in two large school districts



among schools. Figure 2 illustrates the broad variation in success in the two school districts studied with the largest number of high schools. In these districts, the variance among schools in the percent of students taking and passing college-ready coursework implies that the "choice" of high school can have serious, life-long implications.

Consider, for example, two schools: School 2 and School 14, both in District B. Both have a similar student population. In fact, school 14 has a higher concentration of low-income students. But it also had a higher A-G completion rate (60 percent versus 20 percent), demonstrating that better outcomes are possible in schools that are truly committed to ensuring all students have access to rigorous coursework and college opportunity.

ETW's Audits Uncover Sources of Unequal Outcomes

The student outcomes highlighted above are deeply rooted in choices made about policies and practices at the district, school, and classroom levels. Through our analysis of student transcripts, master schedules, and district policies, as well as through our interviews with district administrators, school staff, students, and parents, we have been able to identify many of the factors preventing students from completing the A-G sequence. Each of these factors is discussed below.

- **Master Schedule and Placement Barriers:** Master schedules drive the instructional opportunities available to students. In the districts we studied, master schedules are often constructed in ways that limit rather than expand opportunities. For example, a student who wants to take both Chemistry and Spanish 2 may be prevented from doing so because both classes are offered at the same time. In addition, counselors often play a critical role in either directing students toward rigorous coursework, such as Advanced Placement (AP), or in pointing them toward less rigorous classes that may not meet A-G requirements. Further, struggling students are typically placed in the largest classes with novice teachers, and non-college-bound students are often placed in a hodge-podge of Career Technical Education (CTE) and "filler" courses, preventing them from accessing the course sequences that would constitute true career pathways.
- **Grading Practices:** School-level grading practices have a major impact on students' ability to achieve UC/CSU eligibility. One D or F grade in a single course can prevent a student from completing the A-G sequence. Our partner districts displayed a broad variation in grading practices, with few standards in place for how teachers assign grades. Further, we consistently found insufficient opportunities to remediate D grades in order to maintain A-G eligibility. In

one district, over 1,500 students failed to complete the A-G sequence because of one D or F grade during their high school career.

- **Few Systematic Interventions:** In order to prevent students from falling behind or failing coursework, schools and districts must offer targeted, structured intervention opportunities. Unfortunately, most districts offer insufficient interventions. These generally do not support streamlined credit recovery and are rarely embedded in the master schedule. For example, students who fail a course required to meet the district's graduation requirements will often simply repeat the same class two or three times before passing, instead of being placed in an accelerated program that would better meet their individualized needs. These "serial repeaters" are often found in Algebra I, a core A-G course. When these students finally pass the Algebra coursework, they are often then dropped into less rigorous math classes to complete the credits required for graduation. Furthermore, even when credit recovery is available, students are often not placed into these streamlined courses until their senior year.
- **Poor Articulation between School Levels:** In most cases, districts fail to provide a clear articulation among the elementary, middle, and high school levels. They rarely invest resources in areas such as curriculum mapping, backward planning, and standards alignment. Districts consistently fail to share high school data—such as student achievement, attendance, and attainment information—with middle and elementary school leaders. Without this information, it is impossible for principals to collectively identify and target student areas of need. This is particularly important in English Language Arts and math, as poor performance in core academic areas limits students' ability to access the higher level coursework necessary for college and career readiness. In addition, Latino, African-American, and low-income students who are academically ready rarely have access to the advanced coursework in middle school that would allow them to pursue high-level coursework in high school, including AP and International Baccalaureate (IB) courses or dual enrollment opportunities.
- **Lack of Senior-Year Rigor:** We found a consistent lack of senior-year rigor for many students. For example, college-bound students who have already passed the core A-G requirements prior to their senior year often fail to enroll in a challenging course load, even though research indicates that students are more likely to excel and persist in college when they take rigorous capstone classes as seniors. The same holds true for non-college-bound students. Often the district requirements for graduation are so minimal that seniors have almost nothing left to take, resulting in schedules composed of inconsequential classes.
- **Persistence of Tracking:** Our analysis of course-taking patterns reveals two common tracks: college-preparatory and a "regular" course of study. In most cases, if students start high school in a non-college-preparatory track, they rarely move up, even when they do very well. If they start in a college-preparatory track and struggle, they tend to be dropped down into a regular track and never reappear. In all cases, low-income, African-American, and Latino students are disproportionally represented in the lower track while white and Asian students are disproportionally represented in college-preparatory, AP, and honors classes.

UNLOCKING DOOR TWO: CAREER READINESS

For many students, a four or two-year college education provides a traditional pathway to a career. For many others, the transition to the workplace comes soon after high school, either immediately or after a short period of additional post-secondary education or training. Without readily available data documenting the transition of students from high school to the workforce, it is hard to be sure how well California's high schools prepare students to make this transition. With California still years away from a longitudinal, interagency data system, one approach is to look at levels of preparation, documented by course-taking patterns.

While the A-G course sequence documents the level of academic preparedness students need to apply to a state four-year college, a commensurate career-ready definition is not available. However, the state *has* formally defined "career pathways" as sequences of CTE courses in 15 major industry sectors that describe career preparation in a given field. While there is little evidence to determine whether these pathways truly lead to career readiness and positive labor market outcomes, we nonetheless consider the completion of a career pathway to be a directional indicator of readiness for the workplace.

The Education Trust—West has conducted limited assessments of CTE as part of its Educational Opportunity Audits and plans to further explore this area going forward, looking closely at schools and districts that have implemented models linking college and career preparedness. Here, we share findings gleaned from the five district partnerships discussed above. While none of these districts had yet implemented a district-wide career pathway or career academy approach, they provide useful insights into baseline levels of career preparation in California districts.

TABLE 2: Career and technical coursework from three selected student transcripts

Student	9th Grade	10th Grade	11th Grade	12th Grade
A	1. Nutrition and Fitness 2. Computer Applications in Business	3. Accounting 1 4. Machine Tool Technology 5. Small Animal Care and Management	6. Computerized Graphic Design	7. Business Environments 8. Multimedia Production
B	1. Computer Applications in Business	2. Transportation Technology 3. Digital Electronics	4. Website Design 5. Journalism 6. Family Studies	
C	1. Food Preparation and Nutrition 2. Career and Life Management	3. Business Law		

Career-Readiness Findings from ETW's Audits

Although our Educational Opportunity Audits focused primarily on college-preparatory coursework, our analysis of student transcripts revealed additional patterns in course-taking—including participation in CTE courses and career pathways. Across the sample of five districts, we found that students of color and low-income students were more likely than other students to take career and technical education courses. However, rather than completing a sequential series of courses within one industry sector pathway (e.g., Media and Design Arts or Human Services, among many others) that results in a specific certificate or acknowledgement of pathway completion, many of these students tended to be enrolled in a number of disjointed CTE courses.

In Table 2, we display the career and technical coursework found on three selected student transcripts. Student A completed a *Media and Design Arts* pathway by taking *Computer Applications in Business, Computerized Graphic Design*, and *Multimedia Production*. Student A also took a number of other disconnected courses that did little to build out this pathway, such as *Small Animal Care and Management*. Students B and C, on the other hand, dabbled in a number of CTE courses without completing a full pathway.

So while many students accessed CTE courses, including a number that appear to be rigorous, rarely were they receiving a meaningful level of career preparation. This is troubling because African-American, Latino, and low-income students were less likely to take A-G courses, resulting in a large number of students graduating neither college-ready nor career-ready.

Troubling Implications for Students of Color and Low-income Students

With low-income, Latino, and African-American students more likely to take CTE courses, and less likely to take A-G courses, a troubling picture of tracking emerges. While white, Asian, and more affluent students often take the A-G courses necessary to open doors to college, California's low-income students and students of color are often tracked into less rigorous courses and CTE programs. These courses are usually not sufficiently sequenced to foster real workplace skill development. As a result, students too frequently leave high school with neither college nor career options.

COLLEGE AND CAREER PATHWAYS IN ONE SCHOOL DISTRICT

To better understand this system of tracking and levels of college and career readiness, we further analyzed course-taking data for one of our partner districts, focusing on a single cohort of over 6,000 students from the 2009 senior high school class. We chose this district because it is the one for which we had the most complete electronic transcript data.

Using this data, along with the district's Course of Study manual, we were able to group CTE courses by industry sector, career pathway, and course level (i.e. whether the course was foundational, intermediate, or capstone). CTE courses that are part of Regional Occupancy Centers and Programs (ROCP) courses of study were included. After coding courses, we were able to identify the courses and sequences attempted and completed by each student. This transcript analysis allowed us to identify four groups of students:

1. Students who accessed and completed the A-G course sequence;
2. Students who entered and completed a focused CTE pathway;
3. Students who completed neither; and
4. Students who graduated having completed both a CTE pathway and the A-G sequence. (This last group of students would theoretically have graduated both college and career-ready.)

Although this district offers more CTE courses and well-designed career pathways than most, the evidence from our Educational Opportunity Audits suggests that the overall trends and patterns in this district are representative of what is found across all of our partner districts, and likely statewide.

Nearly all students in this district (97 percent) took at least one CTE course, with the average student taking six CTE courses. Given that many common electives such as Career and Life Management fall under the umbrella of CTE, these high rates of access make sense. However, far fewer students, 68 percent, completed what the district defines as a foundation-level course series. Completion of a foundation-level course series (e.g., both *Computer Applications in Business 1 and 2*) can be an indicator of some level of commitment to or interest in a given field of study; these students have moved beyond the "sampler" approach to course-taking. A smaller group of students, 37 percent of the senior class, also took a more advanced course offering in the same pathway. In addition to the foundation-level series, this group of students had access to and enrolled in an intermediate or capstone-level course. Finally, 22 percent of the seniors took the courses necessary to successfully complete a full pathway.

However, of these pathway completers, only a fraction also completed the A-G course sequence. In fact, just 8 percent of students in the district completed both a CTE pathway and A-G. With 39 percent of students completing A-G without completing a CTE pathway, and 14 percent completing a pathway without also earning UC/CSU eligibility, it is evident that the majority of the district's students are likely to complete either a career-readiness or college-readiness course of study, but rarely both. (See Figure 3.)

We further examined which students were likely to fall into these tracks. The most common pathway for graduating Latino students was one of partial or minimal preparedness, with nearly half (48 percent) of Latino students having completed neither a college nor career-ready set of courses. The most common pathway for white students, on the other hand, was a college-preparatory one. Over half of white students completed the A-G requirements. (See Figure 4.)

FIGURE 3: Distribution of college-ready and career-ready graduating seniors in one large school district

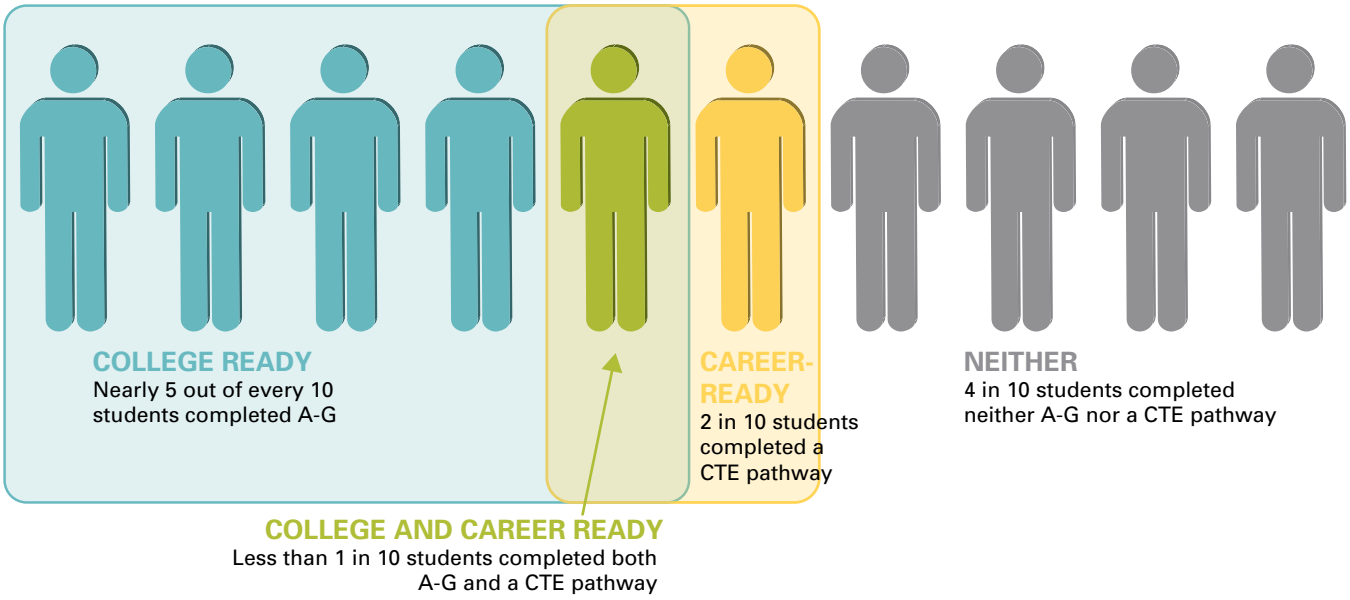
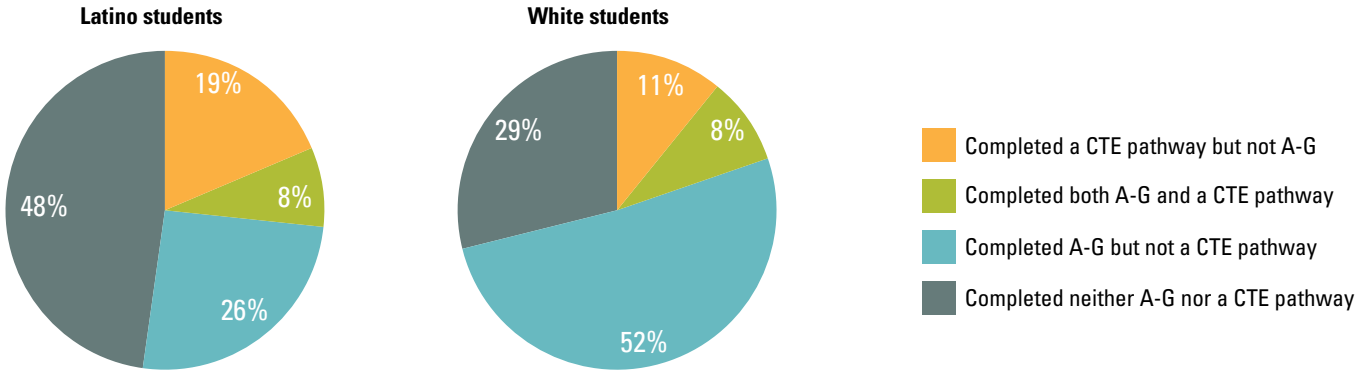


FIGURE 4: Distribution of college-ready and career-ready graduating seniors, by race, in one large school district



When we disaggregate the data by student free or reduced-price meals eligibility, a proxy for income, similar patterns emerge. Only 29 percent of those who completed A-G alone were low-income. Half of low-income seniors graduated without completing either a CTE pathway or the A-G course sequence.

These patterns suggest that some students—namely, students of color and low-income students—are overwhelmingly leaving high school prepared for neither college nor a career. There is clear evidence of tracking, with African-American, Latino, and low-income students far less likely than their more affluent, white, and Asian peers to take and complete A-G courses, but more likely to be tracked into CTE courses, albeit rarely into meaningful course sequences. Although the small number of pathway completers may be prepared and eligible for certain careers, they are also less likely to have the option to apply to a four-year college. Indeed, even in a district which has made a strong commitment to meaningfully constructed career pathways as part of its reform strategy, the overall patterns suggest that most students do not complete specific pathways, and very few are completing both the A-G sequence and a career-ready course of study. Put simply, the minimum curriculum in which most students are enrolled does not provide them with the skills and knowledge needed for college or career options after high school.

UNLOCKING BOTH DOORS: COLLEGE AND CAREER READINESS

Our district engagements have led us to two primary findings. First, students of color and low-income students are less likely to be college-ready than their more advantaged peers, with levels of college readiness far too low across the board. Second, the students who are unprepared for college are also unlikely to be meaningfully prepared for careers. These findings point toward a troubling reality: too few students, particularly students of color and low-income students, are graduating from high school with viable post-secondary options. In a state that needs its high school graduates to be better prepared than ever before, it is abundantly clear that we must approach college and career readiness from a new direction.

Moving forward, high schools must focus on integrating college and career pathways that expand rather than limit students' options. No longer should it be acceptable to sort and track some students into lax, fragmented courses of study, particularly those that include a smattering of poorly connected CTE courses. CTE courses alone are not sufficient and must be paired with a rigorous academic focus within a focused pathway of study. Linked Learning is one approach that commits to do just this.

The Promise of Linked Learning

Linked Learning, formerly known as "Multiple Pathways," has generated a great deal of interest based on the approach's promise to offer students a truly integrated option, with its goal of preparing high school graduates for both college and careers. Linked Learning's basic premise is that high schools can offer a variety of rigorous and meaningful pathways that engage students in learning, but with these paths ultimately meeting at the same destination. The research on Linked Learning is limited, but the four decades of research on "career academies" provide cause for cautious optimism for this new movement: studies have found that career pathways that link learning with student interests and job preparation can lead to higher overall graduation rates, increased college enrollments, and higher earning potential.[10] (See sidebar for more information on the history of career academies and Linked Learning.)

Linked Learning is, by design, a flexible approach that can be delivered through a variety of models, including theme-based small learning academies, career academies that offer every student exposure to an industry sector (e.g., the health professions), and traditional high schools that offer a number of career pathway programs. Regardless of the delivery mode, each Linked Learning site embraces four guiding principles: (1) preparing students for both post-secondary education and career success; (2) leading students to the full range of post-secondary opportunities, including two-year and four-year colleges, certification programs, formal job training, the military, and so on; (3) connecting academics to real-world applications, so that core academic subjects are taught in a way that integrates authentic problems and situations; and (4) improving student achievement and attainment.

Though appealing, the Linked Learning reform strategy is in the early stages of development and implementation in California districts. Therefore, the effectiveness, scalability, and potential of this approach to result in greater equity, improved student academic achievement, and college and career access and success have not yet been determined—although a number of researchers have and continue to explore its potential.[11] Through rigorous evaluation, the state and researchers should seek to answer critical questions such as:

- Does Linked Learning effectively engage and motivate students, while also offering a rigorous academic core?
- Does Linked Learning expand career and college opportunities for all students?
- Does Linked Learning contribute to improved student outcomes for all students, including increased achievement, increased graduation rates, and greater access to post-secondary opportunities?
- Does Linked Learning lead to greater success in college and careers?

FROM CAREER ACADEMIES TO LINKED LEARNING: THE HISTORY OF THE MOVEMENT

More than forty years ago, the "career academy" movement was born in Philadelphia in order to offer students a career-themed high school experience. The first career academies made their way to California in 1981. Today, approximately 800 of these academies are in operation in California, with 500 of those recognized as California Partnership Academies (CPA)—small learning communities, typically operating as schools-within-a-school. These academies and today's diverse array of career pathway programs are intended to prepare high school students for careers and a full range of post-secondary options after high school by integrating rigorous academic concepts into the content of the technical coursework. Many, including the CPAs, also include active business and post-secondary partnerships.

A number of evaluations have contributed to a growing body of research on the effectiveness of career academies, with the most rigorous and influential of these suggesting that career academy students experienced significant gains in employment and earnings, along with high graduation rates and post-secondary attainment.[12]

Linked Learning, supported by the James Irvine Foundation, is an approach that has been formally recognized by the State of California since 2008, when it was codified as "multiple pathways." Now called Linked Learning, the high school reform strategy builds off the history of the career academies movement, but its implementation is, by design, broader and more flexible in that it can be implemented in small-learning communities, within large comprehensive high schools, or wall-to-wall across districts. Also, Linked Learning can be career-based, theme-based, or interest-based – not necessarily just career-based. The approach aims to prepare students for post-secondary education and careers, connect academics to real-world applications, and improve student achievement. There are a rapidly growing number of Linked Learning school sites across California, and nine school districts that have adopted plans for implementing the approach district-wide.

By answering these questions, educators and policymakers will be better able to determine whether Linked Learning can and should serve as a central component of California's high school reform efforts, and if so, how its core tenets and guiding principles can be replicated at scale.

Reform, in Whatever Form

Regardless of the reform strategies used, the need for change is compelling and clear. The nearly 100-year-old model of high school education, which sorts students into two defined tracks—the college-track for the best and the brightest, and the general or occupational track for the rest—makes little sense in today's world. Our state's high schools must produce graduates who are equipped to meet the demands of today's knowledge-based society, and that means ensuring that all students are graduating with the college-level academic preparation and the real-world skills demanded by our colleges and employers.

Realizing this goal for all students will require us to fix the equity and access issues that loom large in our current system. Persistent institutional practices such as tracking create huge barriers in opportunity, particularly for low-income students and students of color.

High schools serve as gatekeepers to post-secondary choice—an enormous responsibility that they must meet by expanding, not closing, doors to opportunity. This means offering every student the rigorous preparation needed to succeed in college, the workplace, and beyond.

NOTES

[1] California State University, Consortium for Student Retention Data Exchange (CSRDE). http://www.asd.calstate.edu/csrde/ftf/2009htm/sys.htm. Data for fall 2004 cohorts.

[2] University of California, Office of the President, StatFinder. http://statfinder.ucop.edu/statfinder. Data for fall 2003 cohort.

[3] Data obtained from the Transfer Velocity Project as provided through the California Community College Chancellor's Data Mart. The Transfer Velocity Project calculates transfer rates by tracking cohorts of first-time college students for six years to determine "behavioral intent to transfer." Behavioral intent to transfer is defined as: (1) having completed at least 12 credit units; and (2) attempted a transfer-level math or English course after six years (n=124,462 students for 2003-04 cohort).

[4] Sum, Andrew, et. al. "Vanishing Work Among U.S. Teens 2000-10: What a Difference A Decade Makes." Center for Labor Market Sutdies Publications, July 2010.

[5] Achieve. "Mathematics at Work" series. Washington, D.C., 2008.

[6] Johnson, Hans. "Higher Education in California: New Goals for the Master Plan." Public Policy Institute of California, April 2010.

[7] See, for example, California Employment Development Department's Projections of Employment by Industry and Occupation at http://www.labormarketinfo.edd.ca.gov and http://www.calmis.ca.gov/specialreports/Occ-CA-Fastest-Growing-Industry-2008-10.pdf.

[8] Achieve, American Diploma Project. "Closing the Expectations Gap 2011: Sixth Annual 50-State Progress Report on the Alignment of High School Policies with the Demands of College and Careers." Washington, D.C., February 2011.

[9] William C. Symonds, Robert B. Schwartz and Ronald Ferguson, "Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century." Report issued by the Pathways to Prosperity Project, Harvard Graduate School of Education, February 2011.

[10] Stern, D., Dayton, C., and Raby, M. "Career Academies: A Proven Strategy to Prepare High School Students for College and Careers." Career Academy Support Network, Updated February 25, 2010.

[11] See, for example, Oakes, J. and Saunders, M. "Beyond Tracking: Multiple Pathways to College, Career, and Civic Participation." Harvard Education Press, 2008.

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ACKNOWLEDGEMENTS

We extend a special thanks to the James Irvine Foundation and the Ford Foundation for their support of this research and the release of this report. We also thank the Bill & Melinda Gates Foundation for its long-standing support of our *Educational Opportunity Audit* and *Blueprint for Action* work.

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THE EDUCATION TRUST–WEST MISSION

The Education Trust—West works for the high academic achievement of all students at all levels, pre-k through college. We expose opportunity and achievement gaps that separate students of color and low-income students from other youth, and we identify and advocate for the strategies that will forever close those gaps.

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